

# Emotional intelligence and social competence: Is there a predictive effect?

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# Introduction

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**Emotional intelligence** (Mayer & Salovey, 1997; in Márquez, Martín & Brackett, 2006, p.118)

(a) Perceive and express emotion, (b) use emotion to facilitate thought, (c) understand and reason with emotion, and (d) regulate emotion in the self and others

It has been associated to:

- Empathy (Ciarrochi, Chan, & Caputi, 2000)
- Altruism (Carmeli, 2003; Charbonneau & Nicol, 2002)
- Social adjustment (Engelberg & Sjöberj, 2004)
- Relationship between colleagues (Brackett, Mayer & Warner, 2004; Lopes, et al., 2004; Lopes, Salovey, & Straus, 2003)
- Leadership potential (Barling, Slater, & Kelloway, 2000)
- Decision-making capacity (Bagacigalupo & Hess, 2011)
- Commitment (Aremu, 2005; Khalili, 2011)
- Resistance to stress (Acosta & Jimenez, 2011)
- Efficiency of performance (Khosravi, Manafi, Hojabri, Farzhadi & Ghesmi, 2011)
- Work attitudes and outcomes (Carmeli, 2003)
- Involvement with work (Ravichadran, Arasu, & Kumar, 2011)
- Lower levels of violence and drug problems (Brackett et al., 2004; Gil-Olarte, Guil, & Mestre, 2004; Trinidad & Johnson, 2002)

# Introduction

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**Social competence** (Candeias, 2008)

The ability to deal and reflect about own and others thoughts, feelings and behaviors, as well as the competence to use the most suitable resources to face and interact with every personal and social specific situations

It has been associated to:

- Quality of the relationships with classmates and teachers (e.g., Henricsson & Rydell, 2006; Lemos & Menezes, 2002; Pinheiro, et al., 2006; Teixeira & Cruz, 2006)
- Academic performance (e.g., Henricsson & Rydell, 2006; Lemos & Menezes, 2002; Pinheiro, et al., 2006; Teixeira & Cruz, 2006)
- Lower learning difficulties (Feitosa, 2007)
- Students' motivation and their will to engage in scholar tasks (Sternberg & Grigorenko, 2003)
- Cooperation with others (Lemos & Menezes, 2002)
- Assertiveness and self-control (Lemos & Menezes, 2002)
- Adaptability and flexibility (Carvalho, 2011; Cecconello, 1999; Sternberg & Grigorenko, 2003)
- Performance and success (Carvalho, 2011; Cecconello, 1999; Sternberg & Grigorenko, 2003)

# Study Goals

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Contemporary theorists originally viewed EI as part of social intelligence (Salovey & Mayer, 1990; p. 189): both concepts are related and may represent interrelated components of the same construct

Gardner (1983) explains personal intelligences: based on intrapersonal (emotional) intelligence and interpersonal (social) intelligence

Emotional-social intelligence is a cross-section of **interrelated emotional and social competencies**, skills and facilitators that combine to determine effective human behavior (Bar-On, 1988, 1997, 2000)

- **Determine the relationship between emotional intelligence and social competence related to career situations**
- **Predict social competence of students related to career situations, from their emotional intelligence**

# Method: Participants

Total: 1121 students - 551 (49.2%)



570 (50.8%)



Age: 11-19 years old ( $M=14.77$ ,  $SD=1.69$ )

Attending the 8<sup>th</sup> ( $n=539$ , 48.1%), 10<sup>th</sup> ( $n=320$ , 28.5%), and 11<sup>th</sup> ( $n=262$ , 23.4%) grades



7 from the northern ( $N = 601$ , 53.61%), central ( $n = 214$ , 19.09%) and southern Portugal ( $n = 300$ , 26.76%)

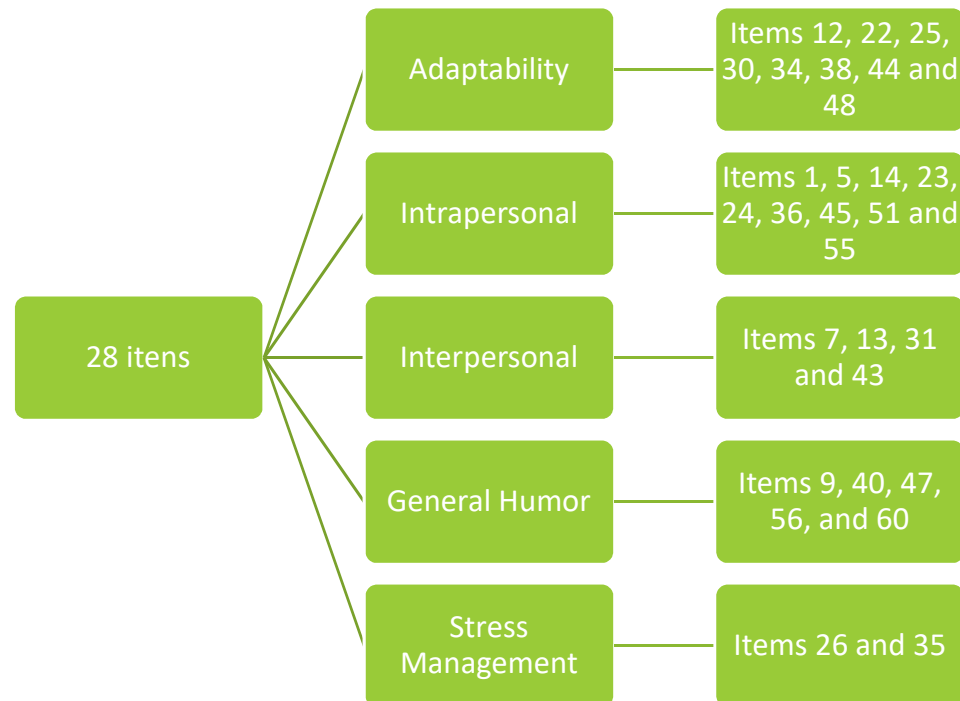
Participants	N	Sex		Age	
	Freq. (%)	F (%)	M (%)	M $\pm$ SD	Min-Max
8 <sup>th</sup> grade	539 (48.1%)	279 (51.8%)	260 (48.2%)	13.27 $\pm$ .59	11-16
10 <sup>th</sup> grade	320 (28.5%)	157 (49.1%)	163 (50.9%)	15.75 $\pm$ 1.04	14-19
11 <sup>th</sup> grade	262 (23.4%)	134 (51.1%)	128 (48.9%)	16.66 $\pm$ .87	15-19
Total	1121 (100%)	570 (50.8%)	551 (49.2%)	14.77 $\pm$ 1.69	11-19

# Method: Instruments

**Bar-on's Emotional Intelligence Questionnaire** (Bar-on, EQ-i: YV, 1997; adapted by Candeias & Rebocho, 2007)

Assesses person's ability to:

- Understand and relate to him/herself and others
- Manage and express his/her emotions
- Adapt to changing personal and social contexts in which different demands of an emotional nature arise

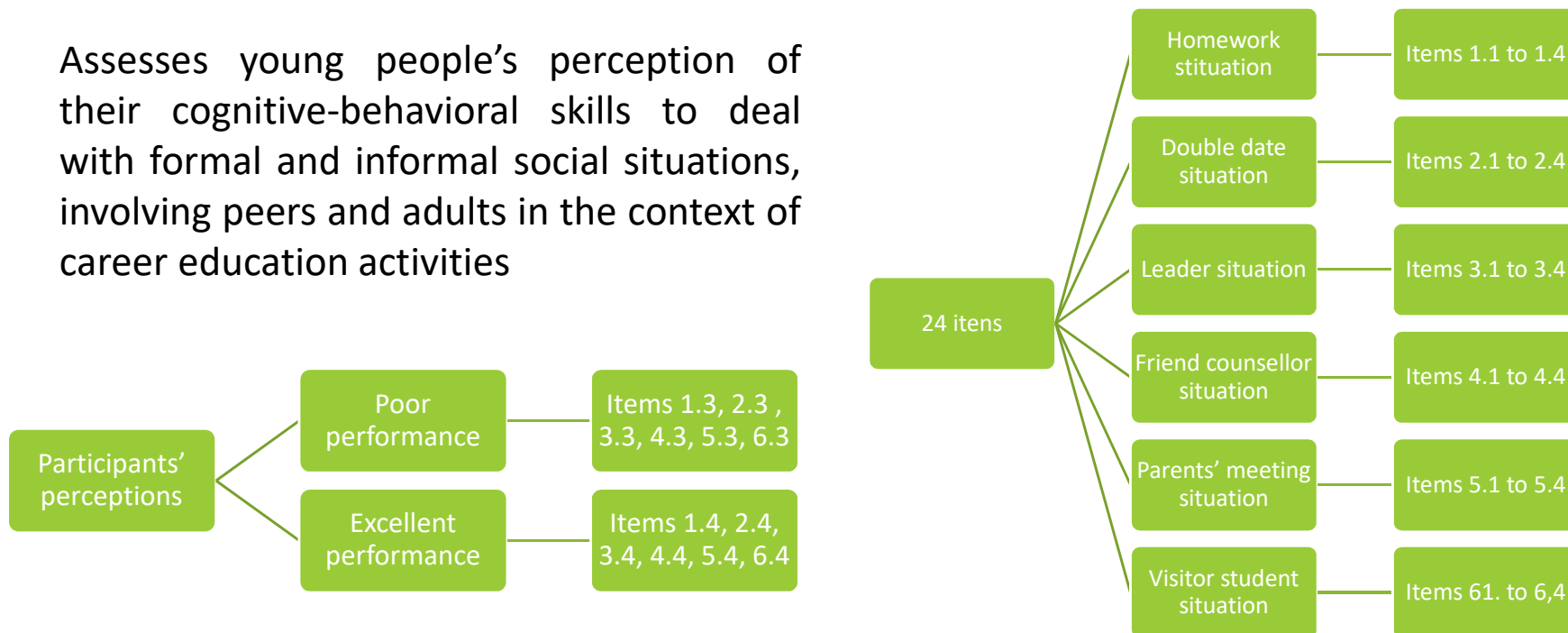


(Bar-On, 1997, 2000; Candeias, Rebelo, Silva, & Cartaxo, 2010)

# Method: Instruments

## The Perceived Social Competence in Career Scale (PSCCarS; Araújo & Taveira, 2009)

Assesses young people's perception of their cognitive-behavioral skills to deal with formal and informal social situations, involving peers and adults in the context of career education activities



# Method: Procedures

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Research project “**Career and citizenship: personal and contextual conditions for the ethical questioning of life projects**”

- Project’ goals were presented to primary and secondary schools of Northern, Central and Southern Portugal, as well as to their teachers, parents and students
- Informed consent was obtained → assessment protocol was administered to the youngsters, in the classroom context → 35 minutes to complete
- Data were inserted into the statistical analysis software SPSS (version 22, for Windows)
  - Descriptive statistics analyses: the PSC-CarS and Bar-On subscales, by academic year and considering the sample as a whole
  - Linear regression analyses: to explore the hypothesis that emotional intelligence subscales predict the perception of social competence on career situations



# Descriptive results

- “Adaptability”, “Intrapersonal” and “General Humor” subscales > than the respective theoretical mean scores
- “Interpersonal” and “Stress Management” subscales < than the respective theoretical mean scores
- There are statistically significant differences between the mean results obtained in five subscales and the respective theoretical mean scores

Bar-On subscales		8 <sup>th</sup> grade (n=539)		10 <sup>th</sup> grade (n=320)		11 <sup>th</sup> grade (n=262)		Total (n=1121)		One sample t test (df=1120)
	Mean score	M±SD	Min-Max	M±SD	Min-Max	M±SD	Min-Max	M±SD	Min-Max	
Adaptability	20	21.53 (3.69)	10-32	20.77 (3.45)	12-32	20.62 (3.19)	14-32	21.10 (3.53)	10-32	10.42 (.000)
Intrapersonal	22.5	31.51 (3.36)	11-36	31.39 (3.23)	20-36	31.46 (3.43)	16-36	31.46 (3.34)	11-36	89.89 (.000)
Interpersonal	10	9.67 (2.19)	4-16	9.16 (1.91)	4-16	9.31 (1.77)	5-14	9.44 (2.03)	4-16	-9.24 (.000)
General humor	12.5	15.72 (3.38)	5-20	15.20 (3.56)	5-20	15.15 (3.06)	6-20	15.44 (3.37)	5-20	29.19 (.000)
Stress management	5	3.94 (1.17)	2-8	3.89 (1.10)	2-8	3.97 (.92)	2-8	3.94 (1.10)	2-8	-32.54 (.000)

# Descriptive results

- The six social situations applied to the career subscales > than the respective theoretical mean scores
- “Poor performance” and “excellent performance” subscales > than the respective theoretical mean scores
- There are **statistically significant differences** between the mean results obtained for each of the eight subscales and the respective theoretical mean scores

PSCCarS - Subscales		8 <sup>th</sup> grade (n=539)		10 <sup>th</sup> grade (n=320)		11 <sup>th</sup> grade (n=262)		Total (n=1121)		One sample t test (df=1120)
	Mean score	M±SD	Min-Max	M±SD	Min-Max	M±SD	Min-Max	M±SD	Min-Max	
Homework	12	14.33 (2.94)	4-20	14.49 (2.86)	4-20	14.48 (2.61)	7-20	14.41 (2.84)	4-20	28.40 (.000)
Double date	12	14.15 (3.23)	4-20	14.58 (3.27)	4-20	14.76 (3.15)	4-20	14.41 (3.23)	4-20	25.00 (.000)
Leader	12	13.94 (3.14)	4-20	13.72 (3.12)	4-20	13.43 (3.25)	4-20	13.76 (3.17)	4-20	18.61 (.000)
Friend counsellor	12	14.80 (3.05)	6-20	15.02 (2.98)	8-20	14.70 (3.10)	6-20	14.84 (3.04)	6-20	31.19 (.000)
Parents' meeting	12	14.09 (3.32)	4-20	13.48 (3.20)	4-20	13.54 (3.24)	4-20	13.79 (3.27)	4-20	18.26 (.000)
Visitor student	12	14.05 (3.12)	5-20	13.72 (3.21)	4-20	13.49 (3.14)	4-20	13.83 (3.16)	4-20	19.33 (.000)
Poor performance	18	23.35 (3.85)	9-30	23.26 (3.49)	14-30	23.00 (3.50)	13-30	23.24 (3.67)	9-30	47.88 (.000)
Excellent performance	18	21.07 (4.11)	8-30	20.67 (3.67)	8-30	20.19 (3.58)	7-30	20.75 (3.88)	7-30	23.74 (.000)

# Correlational results

- The correlations between all subscales of the PSCCarS and all the subscales of Bar-On are **statistically significant**
- The correlation index **is poor** in all correlations, except in the “Excellent performance” from the PSCCarS’ subscale which has a **moderate correlation** with the Bar-On’ subscale “Adaptability” ( $r = .429$ )

	Adaptability	Intrapersonal	Interpersonal	Stress Management	General Humor
Homework	.275 (.000)	.148 (.000)	.217 (.000)	-.130 (.000)	.255 (.000)
Double date	.228 (.000)	.221 (.000)	.186 (.000)	-.115 (.000)	.107 (.000)
Leader	.296 (.000)	.090 (.003)	.141 (.000)	-.084 (.005)	.173 (.000)
Friend counsellor	.273 (.000)	.195 (.000)	.163 (.000)	-.065 (.030)	.072 (.016)
Parents’ meeting	.325 (.005)	.084 (.000)	.173 (.000)	-.116 (.000)	.186 (.000)
Visitor student	.334 (.000)	.080 (.000)	.165 (.000)	-.106 (.000)	.225 (.000)
Poor performance	.292 (.000)	.229 (.000)	.147 (.000)	-.172 (.000)	.168 (.000)
Excellent performance	<b>.429 (.000)</b>	.183 (.000)	.234 (.000)	-.117 (.000)	.173 (.000)

Predictive variables	Predictor variables	R <sup>2</sup> (R <sup>2</sup> aj)	F (5,1115)	β	t (sig)
Homework	Adaptability	.127 (.123)	32.545 (.000)	.188	<b>6.042 (.000)</b>
	Intrapersonal			.062	<b>2.099 (.036)</b>
	Interpersonal			.078	<b>2.466 (.014)</b>
	Stress Management			-.081	<b>-2.752 (.006)</b>
	General Humor			.153	<b>4.914 (.000)</b>
Predictive variables	Predictor variables	R <sup>2</sup> (R <sup>2</sup> aj)	F (5,1115)	β	t (sig)
Double date	Adaptability	.096 (.092)	23.688 (.000)	.159	<b>4.993 (.000)</b>
	Intrapersonal			.152	<b>5.034 (.000)</b>
	Interpersonal			.095	<b>2.984 (.003)</b>
	Stress Management			-.072	<b>-2.393 (.017)</b>
	General Humor			.002	.076 (.939)
Predictive variables	Predictor variables	R <sup>2</sup> (R <sup>2</sup> aj)	F (5,1115)	β	t (sig)
Leader	Adaptability	.101 (.097)	24.964 (.000)	.268	<b>8.473 (.000)</b>
	Intrapersonal			.007	.244 (.807)
	Interpersonal			.010	.299 (.765)
	Stress Management			-.067	<b>-2.247 (.025)</b>
	General Humor			.078	<b>2.484 (.013)</b>
Predictive variables	Predictor variables	R <sup>2</sup> (R <sup>2</sup> aj)	F (5,1115)	β	t (sig)
Friend counsellor	Adaptability	.098 (.094)	24.258 (.000)	.231	<b>7.271 (.000)</b>
	Intrapersonal			.126	<b>4.153 (.000)</b>
	Interpersonal			.067	<b>2.099 (.036)</b>
	Stress Management			-.037	-1.244 (.214)
	General Humor			-.035	-1.107 (.268)

“Homework situation”: predictors, explain a total of **12.3%**

“Double-date situation”: predictors explain a total of **9.2%**

“Leader situation”: predictors explain a total of **9.7%**

“Friend counsellor situation”: predictors explain a total of **9.4%**

“Parents’ meeting”: predictors, explain a total of **12.2%**

“Visitor student situation”: predictors explain a total of **13.3%**

“Poor performance”: predictors explain a total of **13.2%**

“Excellent performance”: predictors explain a total of **20.4%**

Predictive variables	Predictor variables	R <sup>2</sup> (R <sup>2</sup> aj)	F (5,1115)	β	t (sig)
Parents’ meeting	Adaptability	.126 (.122)	32.083 (.000)	.295	<b>9.464 (.000)</b>
	Intrapersonal			-.018	-.601 (.548)
	Interpersonal			.037	1.181 (.238)
	Stress Management			-.105	<b>-3.564 (.000)</b>
	General Humor			.068	<b>2.196 (.028)</b>
Predictive variables	Predictor variables	R <sup>2</sup> (R <sup>2</sup> aj)	F (5,1115)	β	t (sig)
Visitor student	Adaptability	.136 (.133)	35.240 (.000)	.300	<b>9.652 (.000)</b>
	Intrapersonal			-.017	-.578 (.563)
	Interpersonal			.011	.337 (.736)
	Stress Management			-.087	<b>-2.963 (.003)</b>
	General Humor			.119	<b>3.855 (.000)</b>
Predictive variables	Predictor variables	R <sup>2</sup> (R <sup>2</sup> aj)	F (5,1115)	β	t (sig)
Poor performance	Adaptability	.136 (.132)	34.969 (.000)	.242	<b>7.786 (.000)</b>
	Intrapersonal			4.751	<b>4.751 (.000)</b>
	Interpersonal			.091	.091 (.928)
	Stress Management			-4.350	<b>-4.350 (.000)</b>
	General Humor			2.011	<b>2.011 (.045)</b>
Predictive variables	Predictor variables	R <sup>2</sup> (R <sup>2</sup> aj)	F (5,1115)	β	t (sig)
Excellent performance	Adaptability	.207 (.204)	58.257 (.000)	.386	<b>12.989 (.000)</b>
	Intrapersonal			.062	<b>2.175 (.030)</b>
	Interpersonal			.072	<b>2.386 (.017)</b>
	Stress Management			-.095	<b>-3.376 (.001)</b>
	General Humor			.013	.438 (.661)

# Discussion and conclusion

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- Have the skills to be more flexible, realistic, effective, capable of generating change and able to find positive paths in negotiations with daily problems
  - Understand well how their own emotions, and are able to express and communicate their feelings or needs to others
  - Are optimistic people, have a positive perspective in adverse situations and are usually pleasant companies
  - Self-perception as competent persons to deal with specific career situations
- Perceive themselves as having a reduced capacity for listening, understanding and appreciation of the feelings of others
  - Do not seem to be very tolerant in relation to stress, nor do they have a great impulse control
- EI was only modestly correlated with SC
- In what extent the social competence variables can be predicted from the emotional intelligence variables? → weak model → low predictive effect



Our research also supports and extends prior research relating EI to indices of SC (Lopes et al., 2003; Lopes et al., 2004; Trinidad & Johnson, 2002; Vorbach, 2002)

# Discussion and conclusion

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EI and SC need to be effectively promoted, by **educators and policy-makers, integrating lessons on emotional and social literacy into existing school curriculum** (Pinto, Taveira, Candeia, Araújo, & Mota, 2012a) → having a range of emotional and social skills is not synonymous of having a good performance, either in academic or in future professional contexts (Del Prette and Del Prette, 2005)

This study contributes to:

- The current scientific knowledge about the importance of the socio-emotional dimensions of the career learning of students, which can **influence their adaptation and achievement at school and their overall healthiness**
- Organize interventions, in a multilevel approach, **using career education as a useful application context** → it is necessary that people know how to apply that range of skills and knowledge in practical situations of the real life (Pinto, Taveira, Candeia, Araújo, & Mota, 2012)